

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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1. (Currently Amended) A method, comprising:
partitioning a cache array dynamically based upon requests for memory from an integrated device having a plurality of processors, wherein the integrated device includes a graphics processor and a central processing unit.
 2. (Original) The method as claimed in claim 1, further comprising subdividing one or more ways within the cache array.
 3. (Original) The method as claimed in claim 1, further comprising subdividing one or more sets within the cache array.
 4. (Original) The method as claimed in claim 1, further comprising using a single least recently used array to replace ways.
 5. (Original) The method as claimed in claim 1, further comprising applying a multiple pseudo least recently used update based on an entry hit.
 6. (Original) The method as claimed in claim 1, further comprising partitioning dynamically the cache array into a direct-mapped cache.
 7. (Currently Amended) A device comprising:
a cache memory array dynamically partitioned when multiple memory requests are received from an integrated device having a plurality of processors, wherein the integrated device includes a graphics processor and a central processing unit.
 8. (Original) The device as claimed in claim 7 further comprising:

81
an integrated device having a plurality of processors connected to the cache memory array.

9. (Original) The device as claimed in claim 7 further comprising a main memory device connected to the cache memory array.

10. (Original) The device as claimed in claim 8 wherein the integrated device includes a graphics processor and a central processing unit.

11. (Currently Amended) A computer-readable medium having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform the method of:

partitioning a cache array dynamically based upon requests for memory from an integrated device having a plurality of processors, wherein the integrated device includes a graphics processor and a central processing unit.

12. (Original) The computer-readable medium of claim 11 having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of subdividing one or more ways within the cache array.

13. (Original) The computer-readable medium of claim 11 having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of subdividing one or more sets within the cache array.

14. (Original) The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of using a single least recently used array to replace ways.

B1
15. (Original) The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of applying a multiple pseudo least recently used update based on an entry hit.

16. (Original) The computer-readable medium of claim 11 having stored thereon-additional instructions, said additional instructions when executed by a computer, cause said computer to further perform the method of partitioning dynamically the cache array into a direct-mapped cache.

17. – 21. (Canceled)